Claims:

1. A method of creating a compact orbit model, comprising:

obtaining satellite tracking data having a first set of orbit terms that define a first orbit model; and

formatting said satellite tracking data to form formatted data having a second set of orbit terms that define a second orbit model, where a number of terms in said first set of orbit terms is greater than a number of terms in said second set of orbit terms.

2. The method of claim 1, wherein the obtaining step comprises:

receiving satellite signals from a least one receiving station; and

extracting measurement data from said satellite signals; and

forming the satellite tracking data in response to the measurement data.

3. The method of claim 2, wherein the measurement data comprises at least one of: code phase measurements, carrier phase measurements, Doppler measurements, and satellite ephemeris data.

4. The method of claim 1, wherein said satellite tracking data comprises at least one of a satellite orbit model or a satellite clock model.

5. The method of claim 1, wherein said satellite tracking data comprises at least one of: data representative of a satellite orbit model, an orbit model, and data representative of a satellite clock model.

6. The method of claim 1, where said terms in said second orbit model require fewer bits to encode it than said terms in said first orbit model.

7. The method of claim 1, wherein said satellite signals are GPS signals.

8. The method of claim 1, where an accuracy of the data in said second orbit model is increased by decreasing a time interval represented by said formatted data defining said second orbit model.

9. The method of claim 1, wherein said formatting step further comprises:

zeroing a plurality of terms in said first set of orbit terms.

10. The method of claim 9, wherein said formatting step further comprises:

adjusting a plurality of non-zero terms in said second set of orbit terms in response to the effects of zeroing terms in said first set of terms.

11. The method of claim 9, wherein the plurality of terms in said first set of orbit terms that are zeroed are harmonic terms.

12. The method of claim 1, wherein said formatting step further comprises:

replacing a plurality of terms in said first set of orbit terms with a constant value.

13. The method of claim 12, wherein the constant value is determined in response to satellite almanac data.

14. The method of claim 1, wherein said formatted data having said first set of orbit terms comprises parameters defined in ICD-GPS-200.

15. The method of claim 1, wherein at least one term of said second set of orbit terms is defined as a number with a lower resolution than a corresponding term in said first set of orbit terms.

16. A method of creating a compact orbit model, comprising:

receiving satellite signals having satellite tracking data from at least one receiving station;

extracting at least a portion of the satellite tracking data from the satellite signals, where said portion comprises a first set of orbit terms that define a first orbit model; and

formatting said portion to form formatted data having a second set of orbit terms that define a second orbit model, where a number of terms in said first set of orbit terms is greater than a number of terms in said second set of orbit terms.

17. The method of claim 16, wherein said satellite tracking data comprises at least one of a satellite orbit model or a satellite clock model.

18. The method of claim 16, wherein said satellite tracking data comprises at least one of: data representative of a satellite orbit model, an orbit model, and data representative of a satellite clock model.

19. The method of claim 16, where said terms in said second orbit model require fewer bits to encode it than said terms in said first orbit model.

20. The method of claim 16, wherein said satellite signals are GPS signals.

21. The method of claim 16, wherein said satellite tracking data comprises at least one of code phase measurements, carrier phase measurements, Doppler measurements, and satellite ephemeris data.

22. The method of claim 16, where an accuracy of the data in said second orbit model is increased by decreasing a time interval represented by said formatted data defining said second orbit model.

23. The method of claim 16, wherein said formatting step further comprises:

zeroing a plurality of terms in said first set of orbit terms.

24. The method of claim 23, wherein said formatting step further comprises:

adjusting a plurality of non-zero terms in said second set of orbit terms in response to the effects of zeroing terms in said first set of terms.

25. The method of claim 23, wherein the plurality of terms in said first set of orbit terms that are zeroed are harmonic terms.

26. The method of claim 16, wherein said formatting step further comprises:

replacing a plurality of terms in said first set of orbit terms with a constant value.

27. The method of claim 26, wherein the constant value is determined in response to satellite almanac data.

28. The method of claim 16, wherein said formatted data having said first set of orbit terms comprises parameters defined in ICD-GPS-200.

29. The method of claim 16, wherein at least one term of said second set of orbit terms is defined as a number with a lower resolution than a corresponding term in said first set of orbit terms.

30. An apparatus for distributing compact satellite orbit models, comprising:

a database for storing satellite tracking data having a first set of terms that define a first orbit model; and

means for formatting said satellite tracking data to form formatted data having a second set of orbit terms that define a second orbit model, where a number of terms in said first set of orbit terms is greater than a number of terms in said second set of orbit terms.

31. The apparatus of claim 30, further comprising:

at least one satellite signal receiver for receiving satellite signals from at least one satellite;

means for extracting measurement data from said satellite signals; and

means for forming the satellite tracking data in response to the measurement data.